

Atty. Docket No.: RMWR.P007

Patent 09/932,439

IN THE CLAIMS

1 1. (currently amended) A method for conducting a communication session,
2 comprising:
3 during the communication session, triggering a wireless data session with a wireless
4 data channel from a voice session, including pushing data to the wireless data channel and
5 pulling data from the wireless data ~~channel; channel,~~
6 wherein triggering a wireless data session includes transmitting one or more of
7 automatic number identification (ANI) data, dialed number identification service (DNIS)
8 data, and unique identifier (UID) data via a wireless ~~device; device;~~ and
9 during the communication session, triggering a voice session with a voice channel
10 from a wireless data session, including pushing data to the voice channel and pulling data
11 from the voice channel, wherein during the communication session, data is shared between
12 the wireless data channel and the voice channel, the data pushed and pulled includes
13 VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol
14 (WAP) data, short message service (SMS) data, and wireless markup language (WML)
15 data; and
16 a call service that facilitates the communication session, including,
17 communicating with a customer application to receive a specification of data
18 to be pushed or pulled during the communication session;
19 performing data formatting as required on data to be pushed or pulled during
20 the communication session;
21 communicating with an interactive voice response (IVR) application,
22 including transferring formatted data to the IVR application for delivery to a wireless
23 device and receiving data from the wireless device via the IVR application; and
24 an incall service that that handles voice channel content to be sent to a
25 wireless device in response to a request from the wireless device, the incall service
26 including,
27 receiving content from the customer application, wherein the content
28 is selected using a wireless device;

Atty. Docket No.: RMWR.P007

Patent 09/932,439

29 transferring the content to the IVR application;
30 notifying the customer application that the IVR application is ready
31 to communicate with the wireless device; and
32 sending an identifier of the wireless device and a status message to
33 the customer application, wherein the status message indicates a status of communication
34 between the wireless device and the IVR application.

1 Claims 2 and 3 (canceled).

1 4. (currently amended) The method of claim 1~~claim 3~~, wherein the content is
2 selected during the communication session.

1 5. (currently amended) The method of claim 1-2, wherein the content is
2 selected before the communication session, and wherein the content is associated with an
3 identifier of the wireless device.

1 6. (currently amended) A method for conducting a communication session
2 comprising The method of claim 2, wherein the call service further includes:
3 during the communication session, triggering a wireless data session with a wireless
4 data channel from a voice session, including pushing data to the wireless data channel and
5 pulling data from the wireless data channel;
6 wherein triggering a wireless data session includes transmitting one or more of
7 automatic number identification (ANI) data, dialed number identification service (DNIS)
8 data, and unique identifier (UID) data via a wireless device;
9 during the communication session, triggering a voice session with a voice channel
10 from a wireless data session, including pushing data to the voice channel and pulling data
11 from the voice channel, wherein during the communication session, data is shared between
12 the wireless data channel and the voice channel, the data pushed and pulled includes
13 VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol

Atty. Docket No.: RMWR.P007

Patent 09/932,439

14 (WAP) data, short message service (SMS) data, and wireless markup language (WML)
15 data; and
16 a call service that facilitates the communication session, including,
17 communicating with a customer application to receive a specification of data
18 to be pushed or pulled during the communication session;
19 performing data formatting as required on data to be pushed or pulled during
20 the communication session;
21 communicating with an interactive voice response (IVR) application,
22 including transferring formatted data to the IVR application for delivery to a wireless
23 device and receiving data from the wireless device via the IVR application; and
24 an outcall service that that handles voice channel content to be sent to a
25 wireless device at a predetermined time, the outcall service including, including:
26 receiving content from the customer application;
27 transferring the content to the IVR application;
28 notifying the customer application that the IVR application is ready
29 to communicate with the wireless device; and
30 sending a status message to the customer application that indicates a
31 status of communication between the wireless device and the IVR application, including
32 any response from the wireless device.

1 7. (original) The method of claim 1, further comprising a home page
2 provisioning service, including:
3 after the initiation of a voice session from a wireless device, receiving an identifier
4 for the wireless device;
5 terminating the voice session;
6 locating a homepage uniform resource locator (URL) using the identifier;
7 sending the homepage URL to a messaging service, wherein the messaging service
8 sends an actionable alert to the wireless device, wherein the homepage URL is embedded in
9 the actionable alert such that responding to the actionable alert using the wireless device
10 initiates a data session with the homepage URL.

Atty. Docket No.: RMWR.P007

Patent 09/932,439

1 8. (currently amended) The method of claim 1, further comprising a fax
2 service, including:
3 receiving previously scheduled ~~fax~~ a fax data from a customer application;
4 sending the fax data to one or more previously designated recipient fax machines;
5 receiving a request for specific fax data from a wireless device during a data
6 session;
7 receiving a destination fax number from the wireless device; and
8 sending the fax data to the destination fax number.

1 9. (original) The method of claim 8, wherein the data session is a wireless
2 application protocol (WAP) session.

1 10. (currently amended) ~~The method of claim 1, further comprising~~ A method
2 for conducting a communication session, comprising:
3 during the communication session, triggering a wireless data session with a wireless
4 data channel from a voice session, including pushing data to the wireless data channel and
5 pulling data from the wireless data channel;
6 wherein triggering a wireless data session includes transmitting one or more of
7 automatic number identification (ANI) data, dialed number identification service (DNIS)
8 data, and unique identifier (UID) data via a wireless device; and
9 during the communication session, triggering a voice session with a voice channel
10 from a wireless data session, including pushing data to the voice channel and pulling data
11 from the voice channel, wherein during the communication session, data is shared between
12 the wireless data channel and the voice channel, the data pushed and pulled includes
13 VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol
14 (WAP) data, short message service (SMS) data, and wireless markup language (WML)
15 data; and
16 a directory service, including, including:

Atty. Docket No.: RMWR.P007

Patent 09/932,439

17 maintaining a directory of information items including entries formatted for
18 a wireless device display, wherein maintaining includes receiving entries and configuration
19 preferences;
20 retrieving entries in response to a request during a communication session
21 via the wireless device, wherein the request includes a voice ~~request request~~, and a data
22 request; and
23 displaying a requested information item on the wireless device display.

1 11. (currently amended) ~~The method of claim 1, further comprising~~ A method
2 for conducting a communication session, comprising:
3 during the communication session, triggering a wireless data session with a wireless
4 data channel from a voice session, including pushing data to the wireless data channel and
5 pulling data from the wireless data channel;
6 wherein triggering a wireless data session includes transmitting one or more of
7 automatic number identification (ANI) data, dialed number identification service (DNIS)
8 data, and unique identifier (UID) data via a wireless device; and
9 during the communication session, triggering a voice session with a voice channel
10 from a wireless data session, including pushing data to the voice channel and pulling data
11 from the voice channel, wherein during the communication session, data is shared between
12 the wireless data channel and the voice channel, the data pushed and pulled includes
13 VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol
14 (WAP) data, short message service (SMS) data, and wireless markup language (WML)
15 data; and
16 a device registration service, ~~comprising~~, comprising:
17 capturing a device identification (ID) during a data session initiated by a
18 device user for registering the device;
19 querying the user for a telephone number of the device;
20 presenting the user with a personal identification number that is unique to
21 the user;

Atty. Docket No.: RMWR.P007

Patent 09/932,439

22 automatically terminating the data session and initiating a voice session to
23 the device; and
24 during the voice session, prompting the user to enter the PIN; and receiving
25 the PIN and relating the telephone number to the device ID.

1 12. (currently amended) A wireless communication method, comprising:
2 during a communication session, triggering a wireless data session with a wireless
3 data channel from a voice session, including pushing data to the wireless data channel and
4 pulling data from the wireless data channel; and
5 during the communication session, triggering a voice session with a voice channel
6 from a wireless data session, including pushing data to the voice channel and pulling data
7 from the voice channel, wherein during the communication session, data is shared between
8 the wireless data channel and the voice channel;
9 capturing a device identification (ID) during a data session initiated by a device user
10 for registering the device;
11 querying the user for a telephone number of the device;
12 presenting the user with a personal identification number that is unique to the user;
13 automatically terminating the data session and initiating a voice session to the
14 device;
15 during the voice session, prompting the user to enter the PIN; and
16 receiving the PIN and relating the telephone number to the device ID.

1 13. (original) The wireless communication method of claim 12, wherein
2 triggering a wireless data session includes transmitting automatic number identification
3 (ANI) data, dialed number identification service (DNIS) data, and unique identifier (UID)
4 data via a wireless device.

1 14. (original) The wireless communication method of claim 12, wherein the
2 data pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data,

Atty. Docket No.: RMWR.P007

Patent 09/932,439

3 wireless application protocol (WAP) data, short message service (SMS) data, and wireless
4 markup language (WML) data.

1 15. (original) The wireless communication method of claim 12, further
2 comprising toggling between a data channel and a voice channel in one communication
3 session.

1 16. (original) The wireless communication method of claim 12, wherein the
2 data pushed and pulled includes actionable data that initiates an action in a channel
3 receiving the actionable data.

1 17. (original) The wireless communication method of claim 12, further
2 comprising navigating data that was pushed or pulled from the voice channel or the data
3 channel, wherein navigation functions include fast forward, rewind, pause, and delete.

1 18. (canceled).

1 19. (currently amended) A system for wireless network communication,
2 comprising: at least one network coupled among two or more wireless communication
3 devices and at least one customer application; and
4 two or more components coupled to the at least one network, including, a computer
5 telephony integration/interactive voice response (CTI/IVR) service, a fax service, a call
6 service, ~~a fax service~~, and a directory service, wherein the wireless communication devices
7 access the components during a communication session, and wherein the communication
8 session includes,
9 triggering a wireless data session with a wireless data channel from a voice
10 session, including pushing data to the wireless data channel and pulling data from the
11 wireless data channel; and
12 triggering a voice session with a voice channel from a wireless data session,
13 including pushing data to the voice channel and pulling data from the voice channel,

Atty. Docket No.: RMWR.P007

Patent 09/932,439

14 wherein during the communication session, data is shared between the wireless data
15 channel and the voice channel,
16 wherein the call service component includes,
17 an incall service;
18 an outcall service; and
19 a call service interactive voice response (IVR) application, wherein the incall
20 service,
21 receives content from the at least one customer application, wherein
22 the content is selected using a wireless communication device;
23 transfers the content to the IVR application;
24 notifies the customer application that the IVR application is ready to
25 communicate with the wireless communication device; and
26 sends an identifier of the wireless communication device and a status
27 message to the customer application, wherein the status message indicates a status of
28 communication between the wireless communication device and the IVR application.

1 20. (original) The system of claim 19, wherein triggering a wireless data session
2 includes transmitting automatic number identification (ANI) data, dialed number
3 identification service (DNIS) data, and unique identifier (UID) data via a wireless
4 communication device.

1 21. (original). The system of claim 19, wherein the data pushed and pulled
2 includes VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application
3 protocol (WAP) data, short message service (SMS) data, and wireless markup language
4 (WML) data.

1 22. (canceled).

Atty. Docket No.: RMWR.P007

Patent 09/932,439

1 23. (currently amended) The system of ~~claim 19~~claim 22, wherein the outcall
2 service handles voice channel content to be sent to a wireless communication device at a
3 predetermined time, wherein handling includes:
4 receiving content from the customer application;
5 transferring the content to the IVR application;
6 notifying the customer application that the IVR application is ready to communicate
7 with the wireless communication device; and
8 sending a status message to the customer application that indicates a status of
9 communication between the wireless communication device and the IVR application,
10 including any response from the wireless communication device.

1 24. (original) The system of claim 19, wherein the homepage provisioning
2 service component includes:
3 after the initiation of a voice session from a wireless communication device,
4 receiving an identifier for the wireless communication device;
5 terminating the voice session;
6 locating a homepage uniform resource locator (URL) using the identifier;
7 sending the homepage URL to a messaging service, wherein the messaging service
8 sends an actionable alert to the wireless communication device, wherein the homepage
9 URL is embedded in the actionable alert such that responding to the actionable alert using
10 the wireless communication device initiates a data session with the homepage URL.

1 25. (currently amended) ~~The system of claim 19,~~ A system for wireless network
2 communication, comprising: at least one network coupled among two or more wireless
3 communication devices and at least one customer application; and
4 two or more components coupled to the at least one network, including, a computer
5 telephony integration/interactive voice response (CTI/IVR) service, a fax service, a call
6 service, and a directory service, wherein the wireless communication devices access the
7 components during a communication session, and wherein the communication session
8 includes,

Atty. Docket No.: RMWR.P007

Patent 09/932,439

9 triggering a wireless data session with a wireless data channel from a voice
10 session, including pushing data to the wireless data channel and pulling data from the
11 wireless data channel; and
12 triggering a voice session with a voice channel from a wireless data session,
13 including pushing data to the voice channel and pulling data from the voice channel,
14 wherein during the communication session, data is shared between the wireless data
15 channel and the voice channel,
16 wherein the fax service component ~~includes~~includes:
17 an application specific wireless markup language (WML) dialog module
18 coupled to a wireless communication device;
19 a fax server coupled to the WML dialog module; and
20 a messaging service, wherein the fax service,
21 executes a request to send a fax, including receiving the request;
22 ~~including during a wireless application protocol (WAP) session, wherein the request~~
23 ~~includes~~ format and addressing information ~~during a wireless application protocol (WAP)~~
24 ~~session,~~ and sending a status message to a wireless device regarding a status of the request;
25 and
26 executes a scheduled request to send a fax to one or more previously
27 identified recipients, including sending a message to the one or more recipients asking
28 whether the recipient wants to receive the fax, and sending a message to a sender of the
29 scheduled request indicating a status of the scheduled request.

1 26. (currently amended) ~~The system of claim 19, A system for wireless network~~
2 communication, comprising: at least one network coupled among two or more wireless
3 communication devices and at least one customer application; and
4 two or more components coupled to the at least one network, including, a computer
5 telephony integration/interactive voice response (CTI/IVR) service, a fax service, a call
6 service, and a directory service, wherein the wireless communication devices access the
7 components during a communication session, and wherein the communication session
8 includes,

Atty. Docket No.: RMWR.P007

Patent 09/932,439

9 triggering a wireless data session with a wireless data channel from a voice
10 session, including pushing data to the wireless data channel and pulling data from the
11 wireless data channel;
12 triggering a voice session with a voice channel from a wireless data session,
13 including pushing data to the voice channel and pulling data from the voice channel,
14 wherein during the communication session, data is shared between the wireless data
15 channel and the voice channel and;
16 ~~wherein the two or more components further comprise a device registration service,~~
17 ~~comprising, comprising:~~
18 capturing a device identification (ID) during a data session initiated by a
19 device user for registering the device;
20 querying the user for a telephone number of the device;
21 presenting the user with a personal identification number that is unique to
22 the user;
23 automatically terminating the data session and initiating a voice session to
24 the device; and
25 during the voice session, prompting the user to enter the PIN; and receiving
26 the PIN and relating the telephone number to the device ID.

1 27. (currently amended) An electromagnetic medium having instructions stored
2 on it, that when executed by a processor, cause the processor to:
3 during a communication session between two or more devices, trigger a wireless
4 data session with a wireless data channel from a voice session, including pushing data to the
5 wireless data channel and pulling data from the wireless data channel; ~~and~~
6 during the communication session, trigger a voice session with a voice channel from
7 a wireless data session, including pushing data to the voice channel and pulling data from
8 the voice channel, wherein during the communication session, data is shared between the
9 wireless data channel and the voice channel;
10 capturing a device identification (ID) during a data session initiated by a device user
11 for registering the device;

Atty. Docket No.: RMWR.P007

Patent 09/932,439

12 querying the user for a telephone number of the device; presenting the user with a
13 personal identification number that is unique to the user;
14 automatically terminating the data session and initiating a voice session to the
15 device;
16 during the voice session, prompting the user to enter the PIN; and
17 receiving the PIN and relating the telephone number to the device ID.

1 28. (original) The electromagnetic medium of claim 27, wherein triggering a
2 wireless data session includes transmitting automatic number identification (ANI) data,
3 dialed number identification service (DNIS) data, and unique identifier (UID) data via a
4 wireless device.

1 29. (original) The electromagnetic medium of claim 27, wherein the data
2 pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data,
3 wireless application protocol (WAP) data, short message service (SMS) data, and wireless
4 markup language (WML) data.

1 30. (original) The electromagnetic medium of claim 27, further comprising
2 toggling between a data channel and a voice channel in one communication session.

1 31. (original) The electromagnetic medium of claim 27, wherein the data
2 pushed and pulled includes actionable data that initiates an action in a channel receiving the
3 actionable data.

1 32. (original) The electromagnetic medium of claim 27, further comprising
2 navigating data that was pushed or pulled from the voice channel or the data channel,
3 wherein navigation functions include fast forward, rewind, pause, and delete.

1 33. (canceled).

Atty. Docket No.: RMWR.P007

Patent 09/932,439

1 34. (currently amended) A wireless communication apparatus, comprising:
2 means for triggering a wireless data session with a wireless data channel from a
3 voice session, and for triggering a voice session with a voice channel from a wireless data
4 session, wherein during the communication session, data is shared between the wireless
5 data channel and the voice channel; and
6 call service means for facilitating the communication session, including;
7 means for communicating with a customer application to receive a
8 specification of data to be pushed or pulled during the communication session;
9 means for performing data formatting as required on data to be pushed or
10 pulled during the communication session; ~~and~~
11 means for communicating with an interactive voice response (IVR)
12 application, including transferring formatted data to the IVR application for delivery to a
13 wireless device and receiving data from the wireless device via the IVR application; and
14 incall service means that that handles voice channel content to be sent to a
15 wireless device in response to a request from the wireless device, the incall service
16 including:
17 means for receiving content from the customer application, wherein
18 the content is selected using a wireless device;
19 means for transferring the content to an interactive voice response
20 (IVR) application;
21 means for notifying the customer application that the IVR application
22 is ready to communicate with the wireless device; and
23 means for sending an identifier of the wireless device and a status
24 message to the customer application, wherein the status message indicates a status of
25 communication between the wireless device and the IVR application.

1 35. (canceled).

Atty. Docket No.: RMWR.P007

Patent 09/932,439

1 36. (currently amended) The apparatus of claim 34~~claim 35~~, wherein the call
2 service means further includes an outcall service that that handles voice channel content to
3 be sent to a wireless device at a predetermined time, the outcall service, including:
4 means for receiving content from the customer application; means for transferring
5 the content to the IVR application;
6 means for notifying the customer application that the IVR application is ready to
7 communicate with the wireless device; and
8 means for sending a status message to the customer application that indicates a
9 status of communication between the wireless device and the IVR application, including
10 any response from the wireless device.